

ABSTRACT

ACOUSTIC RANGING BY APPLICATION OF LINEAR PERIOD MODULATED SOUND

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A method and apparatus is provided for acoustic ranging by application of linear period modulated sound. In one aspect of the instant invention, an apparatus is provided for acoustic ranging by application of linear period modulated sound. The apparatus includes at least one source adapted to generate at least one modulated Doppler invariant signal and at least one receiver deployed along a seismic sensing cable, wherein the receiver is adapted to receive at least one modulated Doppler invariant signal from the at least one source. The apparatus further includes a signal processing unit adapted to determine the propagation time delay between the source and the receiver using the modulated Doppler invariant signal and the received Doppler invariant signal.

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